CoRAL

The Constrained RESTful Application Language

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CoRAL

A language for the description of typed connec-
tions between resources on the Web ("links") and
possible operations on such resources ("forms")
as well as simple resource metadata for automated
software agents.

* Data <u>and interaction</u> model

* Compact, binary format
  -- suitable for constrained environments

* Lightweight, textual format
  -- easy to read and write by humans

```
<!-- HTML5 -->
<link rel="stylesheet" href="/style.css">
<link rel="icon"       href="/favicon.png">
<link rel="license"    href="/license">

// CoRAL
stylesheet </style.css>
icon       </favicon.png>
license    </license>
```

link relation type

link target (IRI)

3

```
// representation of <coap://robbie.robot/>

id        354675          ← link target (literal)
name      "Robbie the robot"
likes     <coap://susie.robot/>
likes     <coap://nikki.robot/> {
    likes <coap://chris.robot/>
}
```

link from nikki to chris

```
// representation of <coap://susie.robot/>

id          827446
name        "Susie"

power-led   </leds/power1>
power-led   </leds/power2>
status-led  </leds/status>
headlight   </leds/head> {
    update -> PUT <> [accept "example/boolean"]
}
```

form relation type   method   submission IRI

```
// representation of <coap://susie.robot/tasks>

item </tasks/1> {
    description "Pick up the kids"
}
item </tasks/2> {
    description "Return books to the library"
}
create -> POST <> [accept "example/task+coral"]
```

```
// representation of <coap://susie.robot/tasks/3>

description "Take out the trash"
collection </tasks>
update -> PUT </tasks/3>
delete -> DELETE </tasks/3>
```

upcoming specification

`https://tools.ietf.org/html/draft-hartke-t2trg-coral-03`